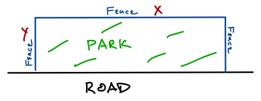
1. A city is planning to build a park along a major road. The park is to be rectangular with an area of 4000 square meters and will be fenced off on the three sides that are not adjacent to the road.



- (a) What is the least amount of fence required for this job?
- (b) What are the dimensions of the park in this case?

2. The city has another project to build a park similar to the one from #1: The park will be along a major road, and it will be fenced off on the three non-road sides.

For this project, they do not have a predetermined area for the park, but they have 300 meters of fence to use for this project.

- (a) What is the largest possible area for the park?
- (b) What are the dimensions of the park in this case?